

# ASRP FISH PASSAGE BARRIER FUNDING GUIDANCE 2021–2023

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## Introduction

The Aquatic Species Restoration Plan (ASRP) has specific goals aligned with the purpose of the program in the context of the Chehalis Basin Strategy. These goals focus on ecosystem restoration and protection actions to benefit the suite of native aquatic and semi-aquatic species that occupy the Chehalis Basin. Many different types of actions have been incorporated into the ASRP to address habitat degradation, including enhancing access and connectivity among habitats through fish passage barrier improvements (i.e., correcting or removing barriers). This document was developed to guide the identification of fish passage barrier improvement projects that meet the specific goals and objectives of the ASRP and are eligible for ASRP funding. It was developed with the full understanding that some barrier improvements do not fit within these goals and objectives and will not be considered for ASRP funding. This guidance was designed to address barrier improvement priorities in the near-term ASRP implementation period (Years 1–10).

There are many barriers to fish passage in the Chehalis Basin, and efforts to address passage conditions are being implemented through multiple programs and organizations. These include the Chehalis Lead Entity, the Salmon Recovery Funding Board, the Fish Barrier Removal Board, and the ASRP. To compile available information on each fish passage barrier and aid in barrier improvement prioritization, the Washington Department of Fish and Wildlife (WDFW) developed the Chehalis Basin Barrier Prioritization Tool ([Chehalis Fish Passage Barrier Prioritization \[wa.gov\]](https://www.wa.gov)). The WDFW Chehalis Basin Barrier Prioritization Tool evaluates multiple factors associated with each barrier in its database and produces a ranking of barriers in the spatial area of the basin selected for a given query.

To aid in the implementation of the ASRP, the Science and Review Team (SRT) developed prioritization and sequencing (P&S) recommendations that are summarized in the [Project Science Guidance](#). The P&S recommendations summarized in the Project Science Guidance constitute a strategic plan that is specific in its actions and sequence at the geospatial unit (GSU) level. For anadromous salmonids (i.e., salmon and steelhead), P&S recommendations were based on modeled analysis of habitat conditions, limiting factors, and projected responses to restoration actions using the Ecosystem Diagnosis and Treatment (EDT) and National Oceanic and Atmospheric Administration (NOAA) salmonid life-cycle modeling. For non-salmon species, the P&S recommendations incorporated the latest information on species distributions and life history requirements.

The “Eligibility for Barrier Correction Funding Criteria” (eligibility criteria) listed in the following section incorporate results of EDT and NOAA modeling and the WDFW Chehalis Basin Barrier Prioritization Tool.

Together these provide the best available information on barrier improvement priorities for salmon and steelhead in the basin that meet ASRP goals and objectives. The eligibility criteria are designed to ensure that barriers selected for funding under the ASRP are in priority GSUs targeted for restoration, and where obstructions have been identified as a key limiting factor to fish productivity and abundance in the GSU based on EDT modeling. Thus, the first eligibility criterion ensures that barrier improvement priorities are consistent with the P&S recommendations. Once a project meets the first criterion, the second eligibility criterion is based on the more detailed and site-specific information in the WDFW Chehalis Basin Barrier Prioritization Tool to select the most significant barriers for improvement. The third eligibility criterion is meant to ensure that landowner willingness has been obtained prior to funding improvements to a selected barrier.

## Eligibility for Barrier Correction Funding Criteria

To be eligible for funding under the ASRP in the near-term implementation period, a barrier selected for improvement must meet all of the following criteria:

1. The barrier is within a priority GSU in the near-term implementation period as defined in the P&S recommendations **and** under the “EDT Limiting Factors” listed in the Project Science Guidance, “obstructions” are identified as a key limiting factor, and
2. The barrier is in the top 33% of a basin-wide prioritization based on the WDFW Chehalis Basin Barrier Prioritization Tool, and
3. Landowner permission has been obtained.

## Additional Factors

Additional factors for prioritizing barrier improvements were also developed. Ecosystem restoration and protection actions through the ASRP are designed to benefit all native aquatic and semi-aquatic species. The EDT and NOAA models and the WDFW Chehalis Basin Barrier Prioritization Tool are based on the needs of anadromous salmonids and do not address other species (non-salmonid fishes, amphibians, mussels, or other species). In developing the P&S recommendations, the SRT used the best available information to identify priority GSUs for selected amphibian species and highlight where barriers may be a particular limiting factor for certain species. Using this and similar information, it may be possible for project sponsors to identify barriers that limit life-cycle connectivity or distribution ranges of other species. Based on the additional factors listed in this section, a barrier improvement that is eligible for ASRP funding based on the eligibility criteria listed in the previous section would be viewed as having a higher priority if information is available indicating that improving the barrier also benefits other species.

The following additional factors should be used to prioritize among barriers meeting the eligibility criteria listed in the previous section under the ASRP:

1. Improving a barrier will provide benefits for multiple species. A key assumption of the ASRP is that correcting passage conditions at barriers for salmon and steelhead will also benefit other

native fish species. Studies on native, non-salmon fish species are being conducted, and this results in additional information on species' distributions becoming available through time. Information on amphibian movement during specific life stages is limited, but access and connectivity for these species is critical. Project sponsors should address how a barrier improvement will benefit other species (non-salmonid fishes, amphibians, mussels, or other species) if this information is available.

2. Improving a barrier will not expand the current distribution of invasive species. During development of the P&S recommendations, concerns were raised regarding the expansion of invasive species distribution within the Chehalis Basin due to barrier improvements and the potential impacts this could have on native species (fishes and amphibians) that are currently isolated above areas where invasive species are present. Project sponsors should consider this negative aspect of barrier improvement and present information on how this concern is being addressed in the project design, if possible.
3. Improving a barrier will help address effects of climate change. A central goal of the ASRP is to overcome these effects, and barrier improvement projects should help achieve this goal by restoring connectivity among habitats. Project sponsors should identify how a barrier selected for improvement expands access to cooler portions of the stream network for native species, allowing them to redistribute further upstream through time and adapt to the effects of climate change.